Bytewise-fellowship

Data Science

Task2:

What is Git?

Git is a distributed version control system that allows developers to keep track of changes to code over time. It was created by Linus Torvalds in 2005 as a tool to help manage the development of the Linux kernel. Since then, it has become one of the most widely used version control systems in the world.

What is GitHub?

GitHub is a web-based hosting service for Git repositories. It was created in 2008 and has since become the most popular Git hosting service in the world. GitHub provides a number of features that make it easy for developers to collaborate on projects, such as pull requests, issues, and wikis.

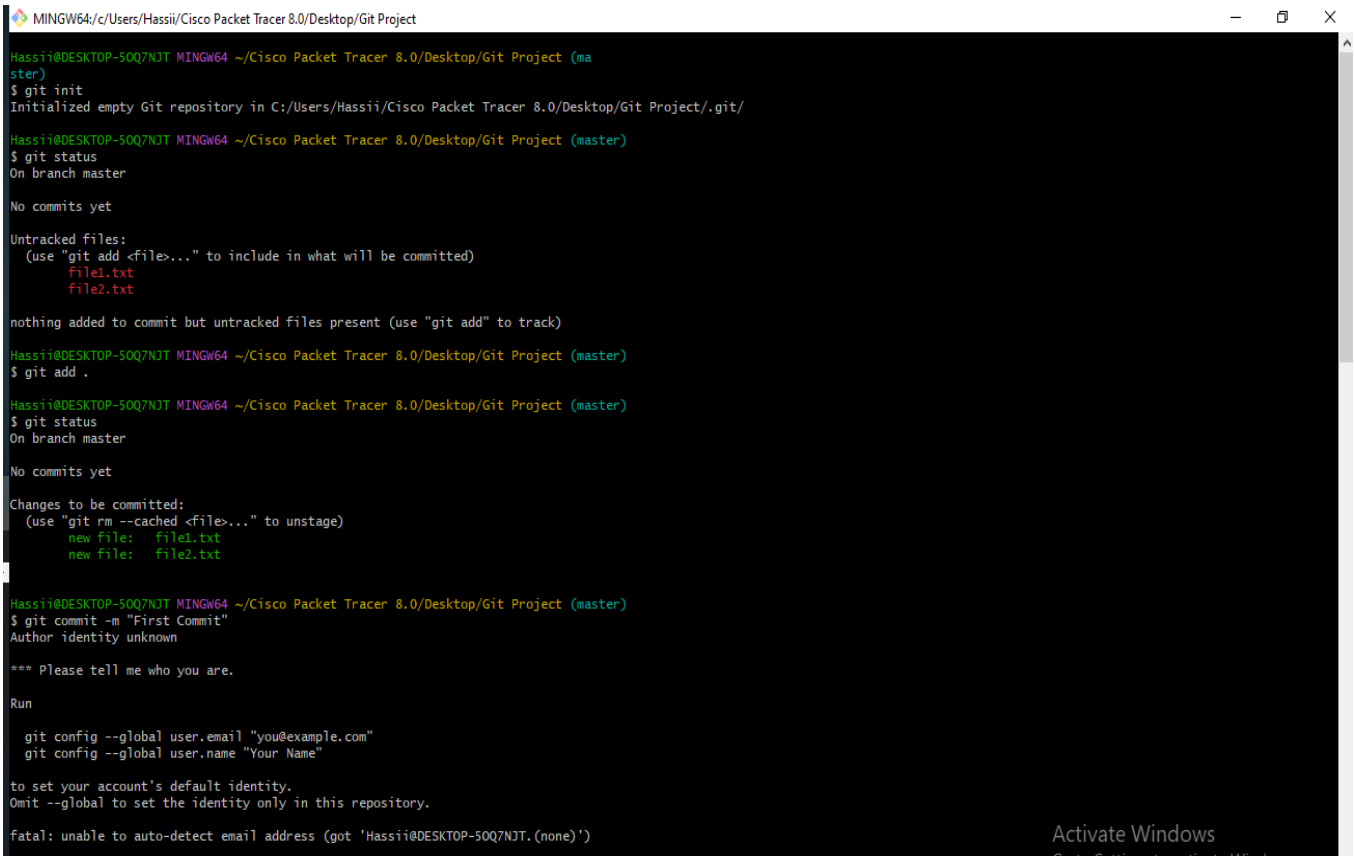
What is Git Branching?

Git branching is a technique in Git that allows developers to create multiple versions of their codebase, known as branches. Each branch is essentially a snapshot of the project's codebase at a specific point in time. Developers can create branches to experiment with new features or ideas without affecting the main codebase.

What is Git Merging?

Git merging is a process in version control systems, specifically Git, where changes from different branches are combined into a single branch. It is an essential feature that allows multiple developers to work on different parts of a project simultaneously, and then integrate their changes into the main codebase.

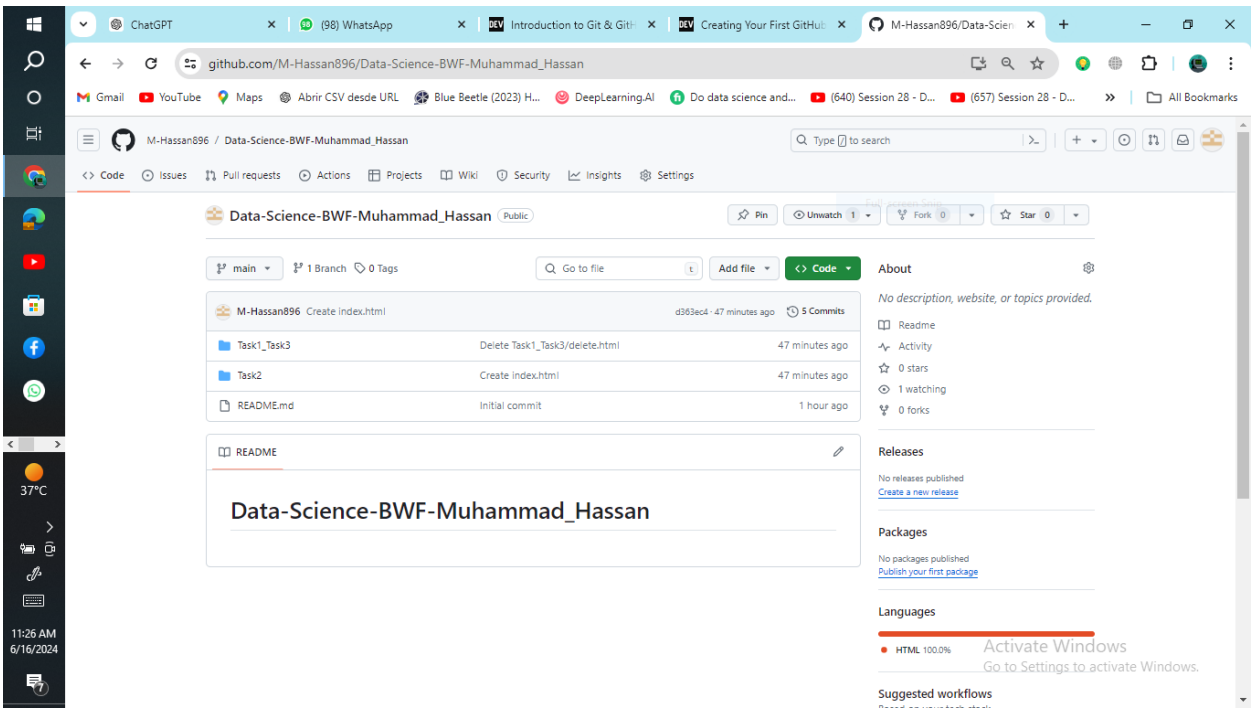
Screenshots:

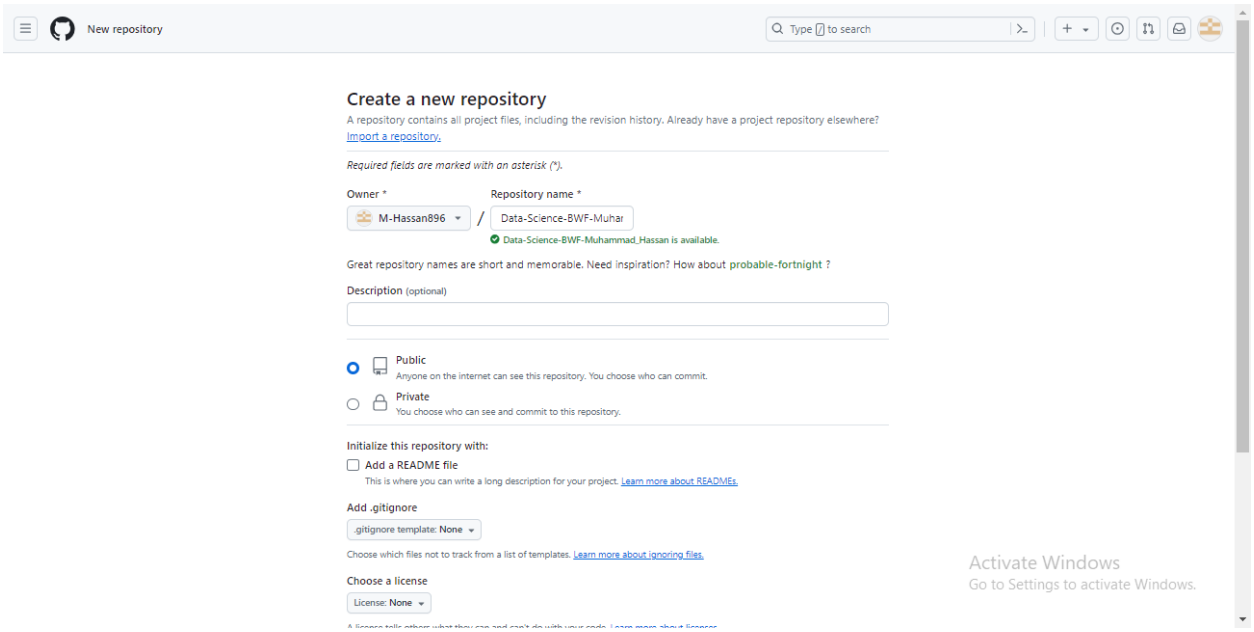


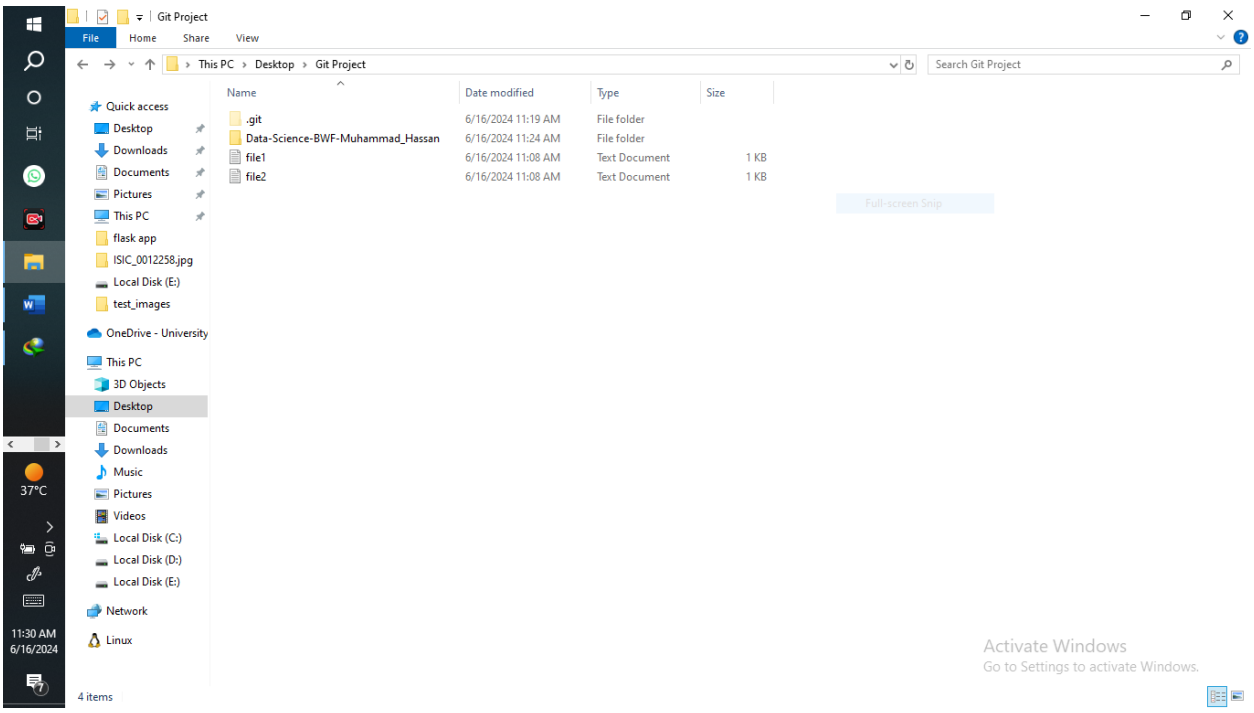
```
Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (master)
$  git config --global user.email "mhassan242002@gmail.com"

Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (master)
$  git config --global user.name "Hassan"

Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (master)
$  git commit -m "First Commit"
[master (root-commit) 555aa01] First Commit
 2 files changed, 2 insertions(+)
 create mode 100644 file1.txt
 create mode 100644 file2.txt

Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (master)
$ git checkout -b DataScience
Switched to a new branch 'DataScience'

Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (DataScience)
$ git status
On branch DataScience
nothing to commit, working tree clean

Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (DataScience)
$ git add .

Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (DataScience)
$ git commit -m "Hello"
On branch DataScience
nothing to commit, working tree clean

Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (DataScience)
$ git status
On branch DataScience
nothing to commit, working tree clean

Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (DataScience)
$ git checkout master
Switched to branch 'master'

Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (master)
$ git checkout DataScience
Switched to branch 'DataScience'

Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (DataScience)
$ git branch
* DataScience
  master
```

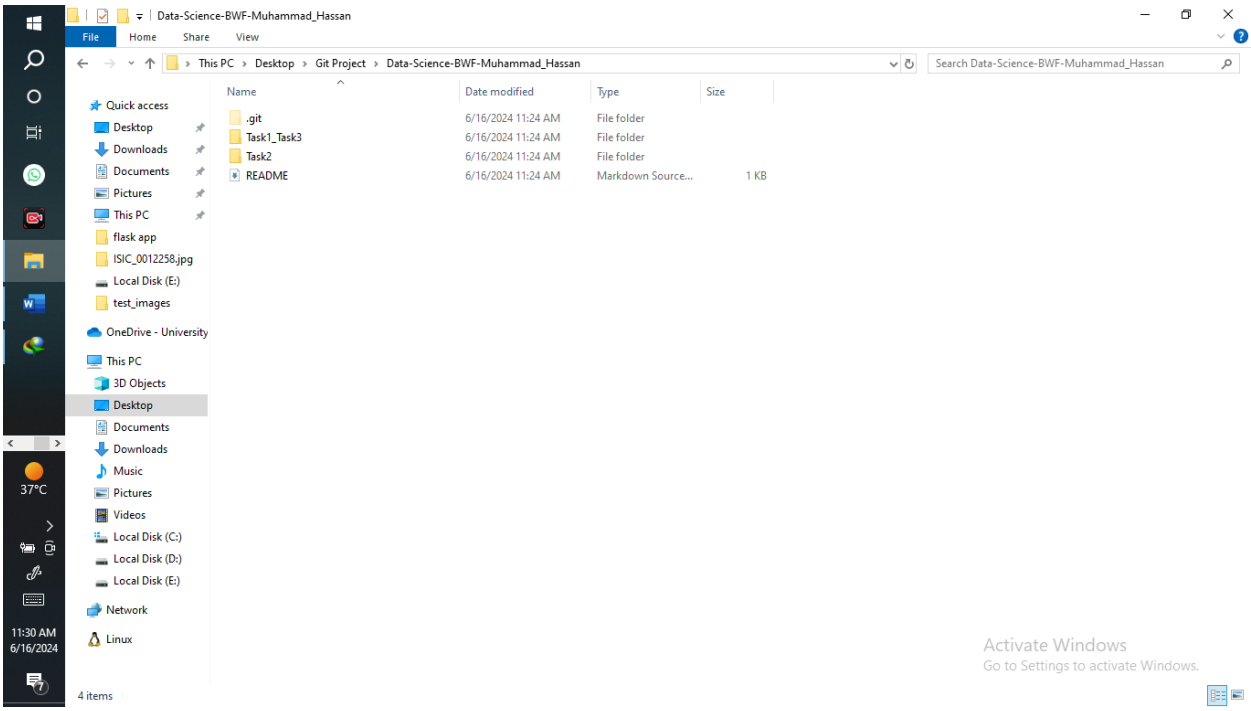
Activate Windows
Go to Settings to activate Windows.

```
Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (DataScience)
$ https://github.com/M-Hassan896/Data-Science-BWF-Muhammad_Hassan.git
bash: https://github.com/M-Hassan896/Data-Science-BWF-Muhammad_Hassan.git: No such file or directory

Hassii@DESKTOP-5OQ7NJT MINGW64 ~/Cisco Packet Tracer 8.0/Desktop/Git Project (DataScience)
$ git clone https://github.com/M-Hassan896/Data-Science-BWF-Muhammad_Hassan.git
Cloning into 'Data-Science-BWF-Muhammad_Hassan'...
remote: Enumerating objects: 17, done.
remote: Counting objects: 100% (17/17), done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 17 (delta 2), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (17/17), 84.10 KiB | 371.00 KiB/s, done.
Resolving deltas: 100% (2/2), done.
```




New repository
Type / to search
Create a new repository
A repository contains all project files, including the revision history. Already have a project repository elsewhere?
Import a repository.
Required fields are marked with an asterisk (*).
Owner *
Repository name *
M-Hassan896
Data-Science-BWF-Muhar
Data-Science-BWF-Muhammad_Hassan is available.
Great repository names are short and memorable. Need inspiration? How about probable-fortnight ?
Description (optional)
Public
Anyone on the internet can see this repository. You choose who can commit.
Private
You choose who can see and commit to this repository.
Initialize this repository with:
Add a README file
This is where you can write a long description for your project. Learn more about READMEs.
Add .gitignore
.gitignore template: None
Choose which files not to track from a list of templates. Learn more about ignoring files.
Choose a license
License: None
Activate Windows
Go to Settings to activate Windows.


Git Project
File
Home
Share
View
This PC › Desktop › Git Project
Search Git Project
Quick access
Desktop
Downloads
Documents
Pictures
This PC
flask app
ISIC_0012258.jpg
Local Disk (E:)
test_images
OneDrive - University
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
Local Disk (D:)
Local Disk (E:)
Network
Linux
Name
Date modified
Type
Size
.git
6/16/2024 11:19 AM
File folder
Data-Science-BWF-Muhammad_Hassan
6/16/2024 11:24 AM
File folder
file1
6/16/2024 11:08 AM
Text Document
1 KB
file2
6/16/2024 11:08 AM
Text Document
1 KB
Full-screen Snip
37°C
11:30 AM
6/16/2024
4 items
Activate Windows
Go to Settings to activate Windows.


Data-Science-BWF-Muhammad_Hassan
File
Home
Share
View
This PC › Desktop › Git Project › Data-Science-BWF-Muhammad_Hassan
Search Data-Science-BWF-Muhammad_Hassan
Quick access
Desktop
Downloads
Documents
Pictures
This PC
flask app
ISIC_0012258.jpg
Local Disk (E:)
test_images
OneDrive - University
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
Local Disk (D:)
Local Disk (E:)
Network
Linux
Name
Date modified
Type
Size
.git
6/16/2024 11:24 AM
File folder
Task1_Task3
6/16/2024 11:24 AM
File folder
Task2
6/16/2024 11:24 AM
File folder
README
6/16/2024 11:24 AM
Markdown Source...
1 KB
37°C
11:30 AM
6/16/2024
4 items
Activate Windows
Go to Settings to activate Windows.